

Description: Guide to configuring TrendWorX32 to log data to Oracle 8.1 or 9i for historical data replay.

OS Requirement: Win 2000 Pro/Server, XP Pro, Server 2003

General Requirement: Installation of TrendWorX32 and Oracle Server 8.1 or 9i, and active ICONICS Oracle DB Connector license.

Creating a New Oracle Database

You have to create a new database in Oracle before configuring your Trend Logger to log OPC Historical Data. Please ask your Oracle System Administrator for additional help if you do not know how to create a new database.

For best connectivity, we recommend that Oracle 9i client tools are installed on the TrendWorX32 node, regardless of the actual Oracle database server version.

Once you have a database created for trend logging, add a database administrator “USER” and Password for this database, which will be required in the ODBC configuration. Set the properties for the new user as shown in .

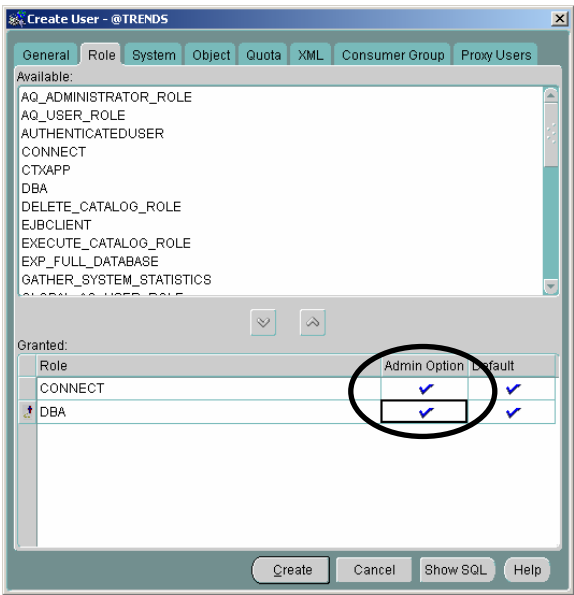


Figure 1 - Oracle User Permissions

TrendWorX32 Logging Configuration

1. Open the TrendWorX32 Configurator from Start → Programs → ICOINCS GENESIS32 → TrendWorX32 → TrendWorX32 Configurator
2. Click on File → New and follow the on screen directions to create a new TerndWorX32 configuration database.
3. In the tree control on the left hand pane, right-click on Configurations to create a new configuration.

4. Right-click on the configuration that you have just created and select New Database Group.
5. In the right-hand pane, give the database group a name and click on the “Brows” button.

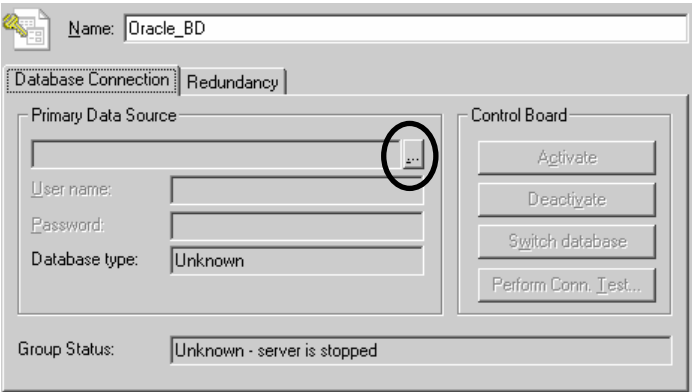


Figure 2 - TrendWorX32 Configurator ODBC Data Source

6. The Select Data Source window will open up as show in Figure 3.
7. Select the Machine Data Source tab, and Click on “New...” to create a new machine data source.

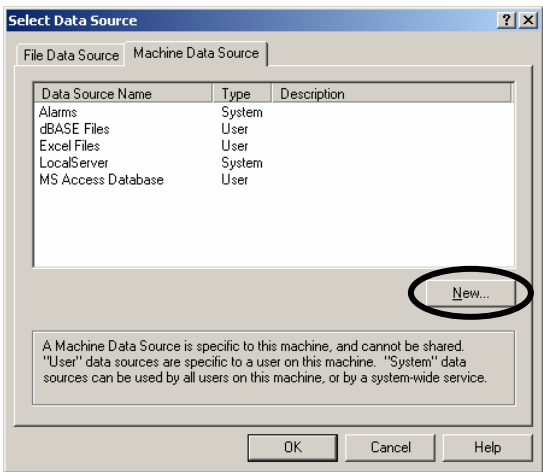


Figure 3 - Select Data Source

8. Select to create a System Data source in the Create a New Data Source window and click “Next”.
9. Select the Oracle Driver in list and click Next.

NOTE: You will have to choose the correct Oracle Driver based on the Oracle Server Version (Oracle 8.1 or Oracle 9i). For additional help, please check with your Oracle Database Administrator.

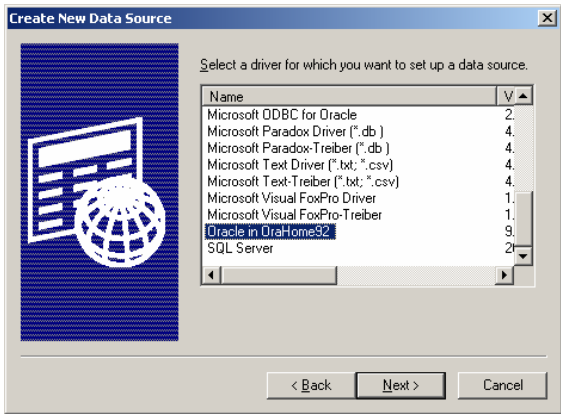


Figure 4 - Select a Data Source's Driver

- Review the information in the screen, click “Back” if you need to change any information or Click “Finish”.
- In the Oracle ODBC Driver Configuration window, give your connection a name.
- In the TNS Service Name, select that database you have created for logging Trend data.
- Give it the User ID that you have created in the previous section.

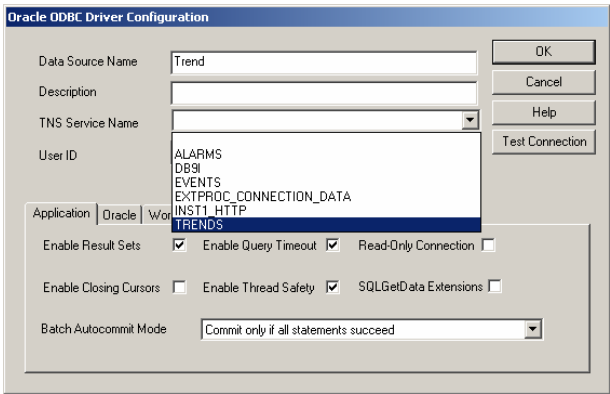


Figure 5 - Configuring the Data Source

- When you are done, click OK, a login window will open. Enter the password that corresponds to the User ID and Click “OK”



Figure 6 - Oracle Login Dialog

- When you return to the Machine Data Source window, you should see the new data source that you have just created in the list selected, click “OK”.
- You should now be in the TrendWorX32 configuration database. For security purposes, you will have to type in the password again. Click “Apply” to save the changes.

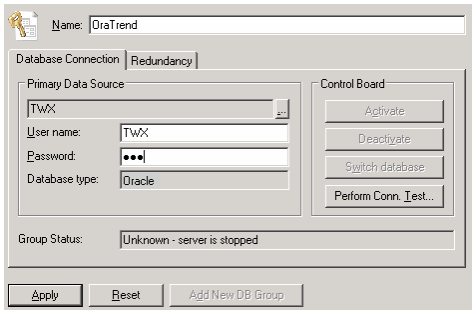


Figure 7 - ODBC Connection in Trend Configurator

- Create your Logging Groups and Tags as you would any other TrendWorX32 Logger Configuration. If you need help with this, please refer to the application note entitled *TrendWorX32 Logger – Data Logging Quick Start*.
- Make the configuration Active by selecting File → Make Active and start Data logging by clicking on the traffic light.

Verifying Logged Data

- To view your logged data, open the Trend database using the Enterprise Manager Console.
- Expand Trends → Schema → TWX → Tables (TWX in this path is the user you created) and you should see your table here.
- Right-click on the table name and select View/Edit Contents from the popup menu to see data in that table.

Optimizing Data Logging Performance

In general, we recommend that you use a remote Oracle server to log data for performance reasons. We also recommend that you only use one database group and data logging groups should range between 10-15 total. Each data logging group should not have more than 200 tags, collecting data at a speed of 1minute or slower with a logging rate should be as slow as possible. For example, if data collection rate for Oracle data logging is every minute, then your logging rate should be every five minutes or slower.

If the total number of tags is under 500, then you could apply faster data collection rates. It is important to monitor the CPU utilization along with the overall system resource utilization to load balance data logging to Oracle for optimal performance.